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10/609,438	07/01/2003	Je-Chang Jeong	Q75265	7906
23373	7590	05/02/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			LE, VU	
			ART UNIT	PAPER NUMBER
			2613	

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Supplemental</b> <b>Office Action Summary</b>	<b>Application No.</b> 10/609,438	<b>Applicant(s)</b> JEONG ET AL.	
	<b>Examiner</b> Vu Le	<b>Art Unit</b> 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2004.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35,37-51,53-55 and 57-95 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-15 is/are allowed.
- 6) ☒ Claim(s) 16-35,37-51,53-55 and 57-95 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 08/024,305.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                        |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____   |

### ***Double Patenting***

#### ***Statutory***

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claims (17-20, 22-24), (25-27, 29-31), (40-43, 45-47) are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims (11-14, 16-18), (19-21, 23-25), (34-37, 39-41) of copending Application No. 10/612,013. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

- a. (17-20, 22-24) are identical to (11-14, 16-18) of '013;
- b. (25-27, 29-31) are identical to (19-21, 23-25) of '013;
- c. (40-43, 45-47) are identical to (34-37, 39-41) of '013.

3. Claims (88-95) are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims (56-63) of prior U.S. Patent No. 6,680,975. This is a double patenting rejection.

Claims (88-95) are nearly identical to claims (56-63) of U.S. Patent No. 6,680,975 except in that claim 88 (independent claim) recites a "mode signal" whereas

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claim 56 (independent claim) of '975 recites a "pattern signal". Despite the different terminology used, both signals represent the same signal that indicates the selected scanning pattern. Therefore, the two sets of claims are indeed the same.

### ***Non-Statutory***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

### **5. Claims (57-60, 62-64), (65-67, 69-71), (72), (80-83, 85-87), (88-91, 93-95)**

**provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims (11-14, 16-18), (19-21, 23-25), (26), (34-37, 39-41), (42-45, 47-49) of copending Application No. 10/612,013.**

**Although the conflicting claims are not identical, they are not patentably distinct from each other because:**

- a. Claims (57-60, 62-64) are nearly identical to claims (11-14, 16-18) of '013 except in that claim 57 does not recite "reordered coefficients". However, it is obvious that entropy coding using a specific scanning pattern as claimed in claim 57 would have resulted in reordered coefficients.

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- b. Claims (65-67, 69-71) are nearly identical to claims (19-21, 23-25) of '013 except in that claim 65 does not recite "reordered coefficients". However, it is obvious that entropy coding using a specific scanning pattern as claimed in claim 65 would have resulted in reordered coefficients.
- c. Claim (72) is nearly identical to claim (26) of '013 except in that claim 72 does not recite "reordered coefficients". However, it is obvious that entropy coding using a specific scanning pattern as claimed in claim 72 would have resulted in reordered coefficients.
- d. Claims (80-83, 85-87) are nearly identical to claims (34-37, 39-41) of '013 except in that claim 80 does not recite "reordered coefficients". However, it is obvious that entropy coding using a specific scanning pattern as claimed in claim 80 would have resulted in reordered coefficients.
- e. Claims (88-91, 93-95) are nearly identical to claims (42-45, 47-49) of '013 except in that claim 88 does not recite "reordered coefficients". However, it is obvious that entropy coding using a specific scanning pattern as claimed in claim 88 would have resulted in reordered coefficients.

**This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.**

**6. Claim 16 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 10 of copending Application No. 10/612,013.**

Claim 16 is nearly identical to claim 10 of copending Application No. 10/612,013 except in that claim 16 recites entropy encoded data being Huffman coded whereas claim 10 of '013 only recites entropy encoded data. However, it is obvious and notoriously well known that Huffman coding is one of the many entropy coding techniques available for use for the benefit of enhancing coding efficiency. Hence, entropy encoded data as claimed in claim 10 of '013 broadly encompass Huffman encoded data. Official Notice is taken.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

**7. Claims 32-35, 37-39 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 26-29, 31-33 of copending Application No. 10/612,013.**

- a. Claim 32 is nearly identical to claim 26 of copending Application No. 10/612,013 except in that claim 32 recites entropy encoded data being Huffman coded whereas claim 26 of '013 only recites entropy encoded data. However, it is obvious and notoriously well known that Huffman coding is one of the many entropy coding techniques available for use for the benefit of enhancing coding efficiency. Hence, entropy encoded data as claimed in claim 26 of '013 broadly encompass Huffman encoded data. Official Notice is taken.
- b. Claim 33 is to claim 27 of '013.
- c. Claim 34 is to claim 28 of '013.

- d. Claim 35 is to claim 29 of '013.
- e. Claim 37 is to claim 31 of '013.
- f. Claim 38 is to claim 32 of '013.
- g. Claim 39 is to claim 33 of '013.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

**8. Claims 48-51, 53-55 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 42-45, 47-49 of copending Application No. 10/612,013.**

- a. Claim 48 is nearly identical to claim 42 of copending Application No. 10/612,013 except in that claim 48 recites entropy encoded data being Huffman coded whereas claim 42 of '013 only recites entropy encoded data. However, it is obvious and notoriously well known that Huffman coding is one of the many entropy coding techniques available for use for the benefit of enhancing coding efficiency. Hence, entropy encoded data as claimed in claim 42 of '013 broadly encompass Huffman encoded data. Official Notice is taken.
- b. Claim 49 is to claim 43 of '013.
- c. Claim 50 is to claim 44 of '013.
- d. Claim 51 is to claim 45 of '013.
- e. Claim 53 is to claim 47 of '013.
- f. Claim 54 is to claim 48 of '013.



g. Claim 55 is to claim 49 of '013.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

**9. Claims (17-24), (25-31), (40-47), (72-79) are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims (18-25), (26-32), (48-55), (33-38) of U.S. Patent No. 6,680,975.**

Although the conflicting claims are not identical, they are not patentably distinct from each other because:

a. Claims (17-24), (25-31), (40-47) are nearly identical to claims (18-25), (26-32), (48-55) of U.S. Patent No. 6,680,975 respectively except in that claims 17, 25 and 40 (independent claims) do not include the phrase "wherein the selected scanning pattern produces the most efficient coding according to a predetermined criterion" in which claims 18, 26 and 48 (independent claims) of patent '975 have. However, it is obvious that different scanning patterns during entropy coding produce different coding efficiencies. Typically, the one that produces that best efficiency is selected. Despite the lack of this phrase in claims 17, 25 and 40, it is obvious and expected that the most efficient scanning pattern is selected for entropy coding in these claims.

b. Claims (72-79) are nearly identical to claims (33-38) of U.S. Patent No. 6,680,975 except in that claim 72 (independent claim) does not recite "reordered coefficients". However, it is obvious that entropy coding using a specific



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scanning pattern as claimed in claim 72 would have resulted in reordered coefficients.

**10. Claims (57-64), (65-71), (80-87) are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims (18-25), (26-32), (48-55) of U.S. Patent No. 6,680,975.**

Although the conflicting claims are not identical, they are not patentably distinct from each other because:

a. Claims (57-64) are nearly identical to claims (18-25) of U.S. Patent No. 6,680,975 except in that claim 57 does not recite "reordered coefficients".

However, it is obvious that entropy coding using a specific scanning pattern as claimed in claim 57 would have resulted in reordered coefficients.

b. Claims (65-71) are nearly identical to claims (26-32) of U.S. Patent No. 6,680,975 except in that claim 65 does not recite "reordered coefficients".

However, it is obvious that entropy coding using a specific scanning pattern as claimed in claim 65 would have resulted in reordered coefficients.

c. Claims (80-87) are nearly identical to claims (48-55) of U.S. Patent No. 6,680,975 except in that claim 80 does not recite "reordered coefficients".

However, it is obvious that entropy coding using a specific scanning pattern as claimed in claim 80 would have resulted in reordered coefficients.

**11.Claim 16 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 18 of U.S. Patent No. 6,680,975.**

Claim 16 is nearly identical to claim 18 of U.S. Patent No. 6,680,975 except in that claim 16 recites entropy encoded data being Huffman coded whereas claim 18 of '975 only recites entropy encoded data. However, it is obvious and notoriously well known that Huffman coding is one of the many entropy coding techniques available for use for the benefit of enhancing coding efficiency. Hence, entropy encoded data as claimed in claim 18 of '975 broadly encompass Huffman encoded data. Official Notice is taken.

**12.Claims 32-35, 37-39 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 33-36, 38-39 of U.S. Patent No. 6,680,975.**

a. Claim 32 is nearly identical to claim 33 of U.S. Patent No. 6,680,975 except in that claim 32 recites entropy encoded data being Huffman coded whereas claim 33 of '975 only recites entropy encoded data. However, it is obvious and notoriously well known that Huffman coding is one of the many entropy coding techniques available for use for the benefit of enhancing coding efficiency. Hence, entropy encoded data as claimed in claim 18 of '975 broadly encompass Huffman encoded data. Official Notice is taken. Furthermore, claim 32 recites a "mode signal" whereas claim 33 of '975 recites a "pattern signal".

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Despite the different terminology used, both signals represent the same signal that indicates the selected scanning pattern. Therefore, the “mode signal” and the “pattern signal” are one in the same.

- b. Claim 33 is to claim 34 of '975.
- c. Claim 34 is to claim 36 of '975.
- d. Claim 35 is to claim 35 of '975.
- e. Claim 37 is to claim 38 of '975.
- f. Claim 38 is to claim 39 of '975.
- g. Claim 39 is to claim 40 of '975.

**13. Claims 48-51, 53-55 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 56-59, 61-63 of U.S. Patent No. 6,680,975.**

- a. Claim 48 is nearly identical to claim 56 of U.S. Patent No. 6,680,975 except in that claim 48 recites entropy encoded data being Huffman coded whereas claim 56 of '975 only recites entropy encoded data. However, it is obvious and notoriously well known that Huffman coding is one of the many entropy coding techniques available for use for the benefit of enhancing coding efficiency. Hence, entropy encoded data as claimed in claim 18 of '975 broadly encompass Huffman encoded data. Official Notice is taken. Furthermore, claim 48 recites a “mode signal” whereas claim 56 of '975 recites a “pattern signal”. Despite the different terminology used, both signals represent the same signal

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that indicates the selected scanning pattern. Therefore, the "mode signal" and the "pattern signal" are one in the same.

- b. Claim 49 is to claim 57 of '975.
- c. Claim 50 is to claim 59 of '975.
- d. Claim 51 is to claim 58 of '975.
- e. Claim 53 is to claim 61 of '975.
- f. Claim 54 is to claim 62 of '975.
- g. Claim 55 is to claim 63 of '975.

### ***Response to Arguments***

14. Applicant's arguments with respect to claims 16-35, 37-51, 53-55, 57-95 have been considered but are moot in view of the new ground(s) of rejection.

15. Applicants' amendment overcomes the following claim objection/rejection of the last Office Action.

- a. Objection of claim 31;
- b. Rejection of claims 16-35, 37-51, 53-55, 57-95 under 35 USC 112 1<sup>st</sup> paragraph.

16. Claims 1-15 are allowed.

### **Contact**

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu Le whose telephone number is 703-308-6613. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 703-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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